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AGENDA ITEM 9c

TO: MEMBERS OF THE INVESTMENT COMMITTEE

I. SUBJECT: New Enhanced Indexing Initiative

II. PROGRAM: Global Equity

III. RECOMMENDATION: Information only

IV. ANALYSIS:

Executive Summary

This information item is a follow-up to the New Enhanced Indexing Initiative agenda item presented to the Investment Committee at its November 14, 2005 meeting. The purpose of this agenda item is to provide additional information on the strategy and seek input from the Investment Committee. This is a new strategy for CalPERS that would complement the existing lineup of traditional active and enhanced indexing equity managers. Additionally, the strategy should improve returns while reducing risk to the overall program.

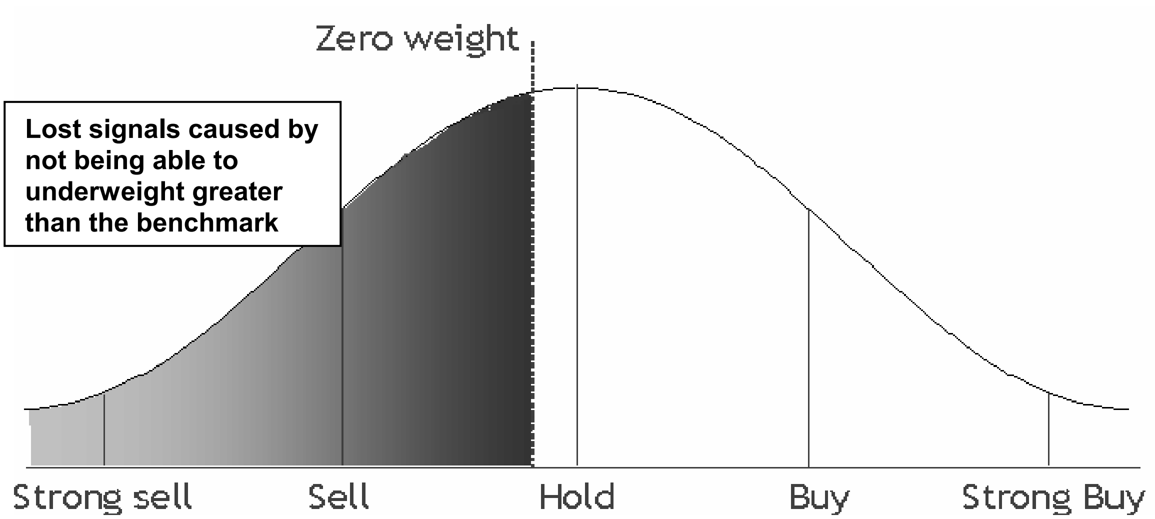
The November 14, 2005 Investment Committee agenda item on this subject is included as Attachment 1. That agenda item explains how relaxing the long-only constraint is an improvement over traditional long-only equity portfolios and why inclusion of this strategy should help CalPERS achieve its performance objective for the U.S. and international public equity asset classes. Included in that agenda item as attachments are: (1) the Wilshire opinion letter; (2) the Discussion on the Issue of Shorting paper; and (3) the Details of Possible RFP for Long/Short Enhanced Indexing Managers document.

The additional information contained in this new agenda item is in response to Investment Committee feedback on the November 14, 2005 agenda item. Included are discussions on (1) the impact of the long-only constraint; (2) a comparison, including information ratios, of the proposed strategy with a long-only strategy using simulated returns; (3) actual results of the proposed strategy; and (4) a comparison of the strategy to a market neutral absolute return strategy.

Impact of the Long-Only Constraint

When a quantitative manager does security analysis, they rank their universe of stocks from best performers to worst performers relative to the benchmark. The stocks ranked best they want to overweight the most. The stocks ranked worst would be the ones they would want to underweight the most. The problem with a long-only strategy is that over half of the securities in the S&P 500 have a weight of 10 basis points (1/10 of 1%) or less. If any of these securities fall in the worst performer ranking, the manager can not take a meaningful underweight in the security due to the long-only constraint. The chart below shows an example of how a quantitative manager's signals are lost by the long-only constraint.

Chart 1 – Signal Strength of a Quantitative Manager's Stock Universe

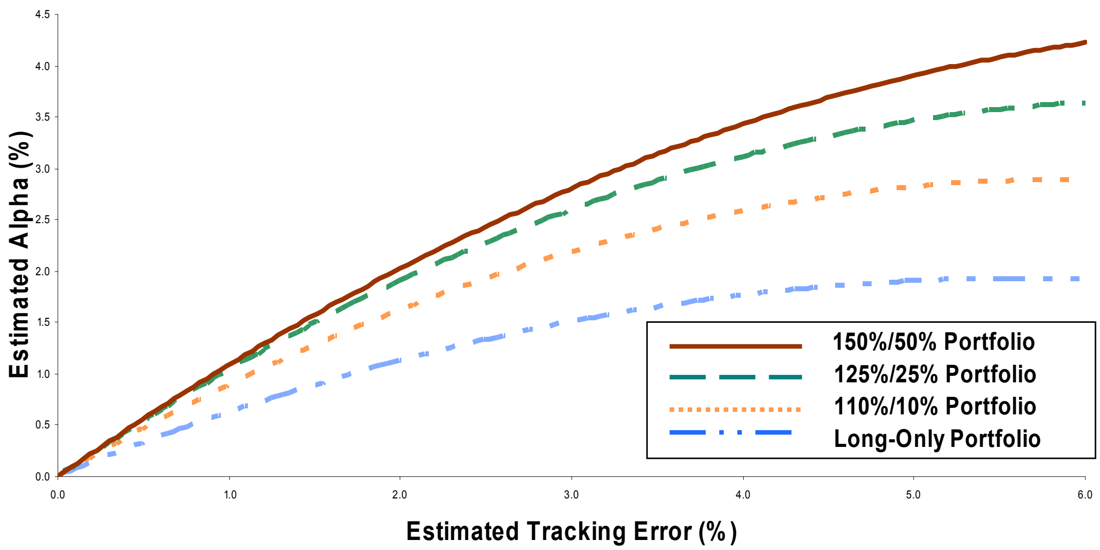


As the chart shows, the manager loses a large amount of their research output by not being able to transfer over 40% of their forecasts into the portfolio. This results in a very inefficient implementation of their forecast process due to a portfolio construction constraint.

Comparison of Proposed Strategy with Long-Only Using Simulated Returns

Graph 1 on the next page shows how the efficient frontier improves when the long-only constraint is relaxed. Relaxing the long-only constraint allows the portfolio manager to short a security. That is, the manager borrows the stock from a broker and sells it in the market with the expectation of buying the stock back at a later date and a lower price, this is know as "selling high and buying low". The resulting higher active return for a given risk level is because the long-only constraint prevents portfolio managers from fully capturing their negative views on particular stocks. This is because they can only underweight a stock by its weight in the benchmark. At the same time the long-only constraint also prevents managers from fully capturing their positive views due to concerns with the amount of risk taken in each position. In particular, with the long-only constraint, managers cannot overweight small cap stocks without creating a small cap bias. This is a potential uncompensated source of risk because the managers cannot offset the small cap overweights with equal small cap underweights. By relaxing the long-only constraint, managers can better capture their negative and positive views, leading to more efficient portfolios.

Graph 1 – Long-only Versus Various Shorting Strategies



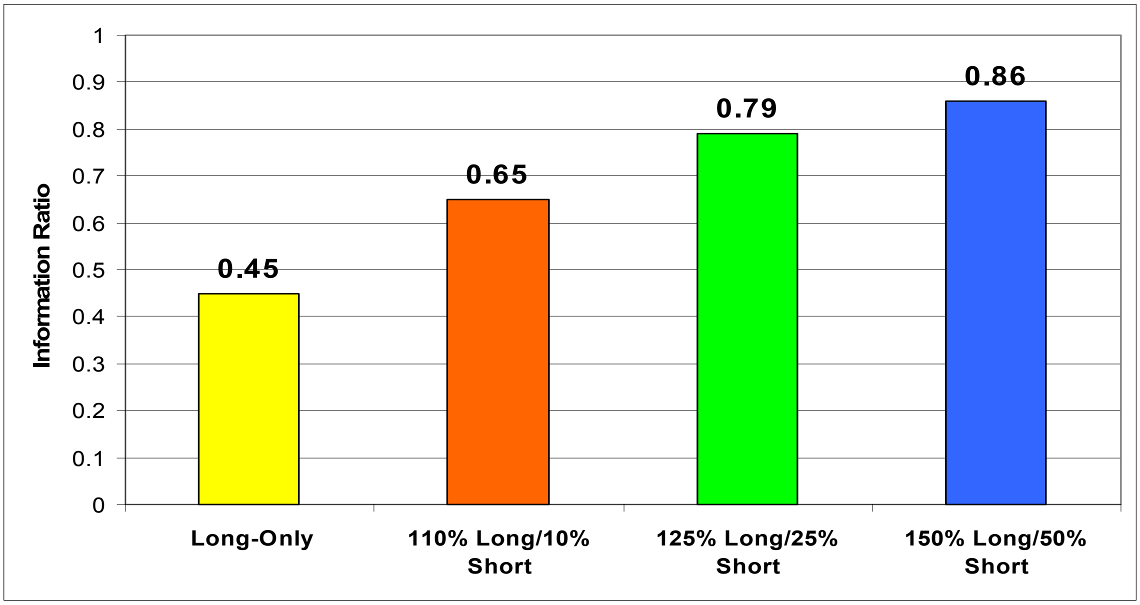
Relaxing the long-only constraint has a direct impact on a portfolio's efficiency (return for unit of risk, also known as information ratio), but it does not necessarily change the portfolio's expected active risk. Relaxing the long-only constraint allows a different, and more efficient, set of active weights. Table 1 below shows how the portfolios improve using the information ratio as the measure of efficiency at a tracking error of 4.0%.

Table 1 – Information Ratio of Long-Only Versus Proposed Strategies

	Long-Only	110% Long/ 10% Short	125% Long/ 25% Short	150% Long/ 50% Short
Beta	1.0	1.0	1.0	1.0
Tracking Error	4.0	4.0	4.0	4.0
Expected Alpha	1.8	2.6	3.1	3.5
Information Ratio	**0.45**	**0.65**	**0.79**	**0.86**

Note that the information ratio improves as the amount of shorting increases, although the magnitude of the increases begins to diminish. Graph 2 on the next page shows how much the information ratio improves as the amount of shorting is increased.

Graph 2 – Information Ratio Comparison (Simulated Returns)



Actual Results of the Proposed Strategy

Currently two managers have provided CalPERS with actual performance results of their strategies as shown in Table 2. Please note that each strategy has a different level of shorting and a different inception date.

Table 2 – Actual Results of Long-Only Versus Limited-Short Strategy

	Period	Long-Only Strategy			Limited-Short Strategy		
		Active Return	Tracking Error	Information Ratio	Active Return	Tracking Error	Information Ratio
Manager 1 120%/20% Strategy	7/02 - 9/05	0.33%	2.73%	**0.12**	2.34%	3.50%	**0.67**
Manager 2 130%/30% Strategy	7/04 - 9/05	0.28%	1.38%	**0.21**	1.45%	1.91%	**0.78**

The results show that limited shorting improved the performance and information ratio of both strategies. Graph 3 on the next page shows the improvement in the information ratio for each manager by relaxing the long-only constraint.

Graph 3 – Information Ratio Comparisons (Actual Results)

Comparison of Proposed Strategy to an Absolute Return Strategy

Table 3 below highlights the differences between the proposed strategy and a typical market neutral absolute return strategy. In addition to Beta, other differences include the benchmark, exposure to shorts, use of leverage, and fees.

Table 3 – Features of Proposed Strategy versus Risk Managed Absolute Return Strategy

	Benchmark	Beta (to the market)	Maximum Shorting	Leverage	Fees
Enhanced Strategy	Equity Benchmark	Close to 1.0	35%	No leverage	Base fee + performance fee
Market Neutral (ARS)	T-bills + 5%	Close to Zero	100% or more	Typically uses leverage	Base fee + 20% of profits

As the table shows, although both strategies have shorting in common, there are major differences in benchmark, market exposure targets, amount of shorting, leverage, and fee structure.

Risks

As stated in the previous agenda item and Wilshire's opinion letter, there are risks associated with this strategy including, but not limited to, the costs and complexity of selling stocks short. However, CalPERS currently has in place analytical systems to monitor the risk exposures in the portfolios for any period including real time. In addition, CalPERS will limit the extent to which a manager can relax the long-only constraint.

Conclusion

Staff welcomes questions and feedback from the Investment Committee on this proposal. At a later date, staff may request Investment Committee approval for an RFP with a Spring-Fed Pool feature to hire U.S. and international managers of enhanced indexing products that include a relaxation of the long-only constraint.

V. STRATEGIC PLAN:

VIII. Manage the risk and volatility of assets and liabilities to ensure sufficient funds are available, first, to pay benefits and second, to minimize and stabilize contributions.

VI. RESULTS/COSTS:

This item is brought to the Investment Committee in order to enhance risk-adjusted returns and improve the Global Equity opportunity set. Should staff return with an action item recommending an RFP to search for managers who can relax the long-only constraint, the allocation to these managers would come primarily from assets that are managed on a passive basis. In addition, some funding may be obtained from a reduction in the assets of CalPERS' current external managers or from cash inflows. Current staffing within Global Equity is sufficient to develop and execute this initiative.

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